ABSTRACT

Disclosed is a stacked variable inductors manufactured by stacking M ($M \geq 2$) metal layers on a semiconductor substrate, and provides stacked variable inductors comprising, 1 to N inductors continuously connected in serial, wherein each of said inductors is formed on N ($N \leq M$) metal layers that are different each other; first and second ports each connected to the highest positioned inductor and to the lowest positioned inductor among said 1 to N inductors; and at least one MOSFET, and wherein one terminal of at least one MOSFET is connected to one of the first and second ports, and the other one is connected to one of adjacent terminals connected in serial between 1 to N inductors.